## **Minutes of Public Meeting**

# **Environmental Quality Commission**

Morehead State University, Morehead, Kentucky. May 31, 2002

### **EOC Commissioners and Staff Present**

Aloma Dew, Chair
Betsy Bennett, Vice-Chair
Patty Wallace
Serena Williams
Bob Riddle
Jean Dorton
Gary Revlett
Staff
Leslie Cole, Director
Erik Siegel, Assistant Director
Lola Lyle, Research Analyst

Frances Kirchhoff, Administrative Assistant

## **Speakers/Representatives Present**

John Volpe, Kentucky Dept for Public Health Fazi Sherkat, Kentucky Division of Waste Management

## **Opening Remarks/Approval of EQC Meeting Minutes**

Environmental Quality Commission (EQC) Chair Aloma Dew opened the meeting at 8:30 a.m. The focus of the meeting was to brief the Commission about Maxey Flats Low-Level Radioactive Waste Superfund Site. There were approximately 20 people in attendance including County Judge Executive Homer Hurst, Jr.; Charles Mattox, a reporter for the *Gazette*; and Scott Wartman a reporter for the *Ledger Independent* in Maysville.

Mr. John Volpe gave a presentation about the history of Maxey Flats, the monitoring activities and the impact on public health.

# • Overview of Maxey Flats

Maxey Flats, a 280-acre low-level radioactive site is located in Fleming County. Maxey Flats opened in 1963 and closed in 1977 after groundwater contamination was detected leaking offsite. The site has operated under an atomic energy license issued under (what is now) the Cabinet for Health Services. Maxey Flats site received some 6 million cubic feet of radioactive waste contained 2.5 - 5 million curies.

# • Site Cleanup Plan

The site is being remedied as a national priority superfund site under a federally court-ordered consent decree. The cost of remediation is about \$60 million. It is a two Phase remediation: Initial Remedial Phase and Balance of Remedy Phase.

- Initial Remedial Phase Conducted by Settling Private Parties Set for Completion Fall 2002
- Balance of Remedy Phase Conducted by Commonwealth and consists of two-phases over 100 years – Begins Fall 2002.
  - Interim Maintenance Period Remedy Complete
  - Final Cap Placement

The Cabinet for Health Services has Memorandum of Agreement with the Natural Resources and Environmental Protection Cabinet to provide technical assistance for the Remedial Action at the Site.

Phase 1 of the remediation began in 1996-97 and is scheduled to be complete the fall of this year. A 537 acre buffer strip was also purchased around the site. When Phase 1 is complete, the Commonwealth will take over the monitoring and maintenance of the site. Phase II will began in the fall of 2002. The consent decree requires the Commonwealth to develop a Performance Standards Verification Plan (PSVP) and an Interim Maintenance Plan (IMP). The PSVP establishes that monitoring is continued to assess long-term performance of the remedy implemented under the Initial Remedial Phase. The IMP establishes procedures for maintenance such as fence repair, drainage channel maintenance, subsidence monitoring, initial cap repair and replacement and trench leachate monitoring.

#### • Test Results

In 2001, 1,535 samples from various media were collected and 6,078 analyses on the samples were conducted. Analyses of groundwater and surface water samples included cobalt-60, cesium-137, strontium-90, tritium, carbon-14, isotopes of uranium, and isotopes of plutonium. Another 6,902 quality control analyses were conducted in order to ensure the data may be verified and validated. Sampling for Rock Lick Creek at highway 158 revealed average tritium levels at 1.2 pCi/mL during 2001. Assuming surface water at this location could be used as a drinking water source with a mean annual activity of 1.2 pCi/mL, an individual consuming 730 liters of water per year would receive an annual radiation dose of 0.06 millirem per year. The U.S. EPA public drinking water standard is 4 millirem per year.

Questions followed Mr. Volpe's and Mr. Sherkat's presentation.

- **Q.** What kind of monitoring is done on the site?
- **A.** Monitoring activities include ground water, surface water, soil and air. Samples are collected every day of the year and an average for that year is obtained. This data is used for risk assessment and its impacts on public health.
- **Q.** What is the most volatile chemical at Maxey Flats?
- **A.** The most volatile radionuclide is tritium.
- **Q.** Is there a particular area of the site that is of greatest concern?
- **A.** Based on the water samples, the East drain is the area of greatest concern because of the main channel. This location has the highest levels of tritium
- **Q.** What is the highest level at this location?
- **A.** The highest level at this location last year was 50 curries.
- **Q.** What is a currie?
- **A**. A currie is the measured amount of radioactive material activity.
- **Q.** Is there a guard on duty at the site?
- A. The area has controlled access with a fence and gate. No one is living there.
- **Q.** Are there signs posted around the area showing the area is restricted?
- **A.** No signs are posted indicating the restricted areas.
- **Q.** Does tritium accumulate in the body?
- **A.** No, it does not accumulate in the body.
- **Q.** Are there any drinking water wells in the area?

- **A.** No, the area has been on a municipal water supply since early 1980s.
- **Q.** What about deer drinking the water? Has there been a study of the animals in the area?
- A. Yes, an animal study was done at Morehead State University.
- **Q.** Have fish tissue been tested?
- **A.** We look at the water and the water doesn't represent a risk. Tissue samples would be too expensive to do especially since there shows no ecosystem risk. We provide the Commonwealth with the best monitoring plan possible for this site, the best possible validated data, at the most cost-effective use of tax dollars.
- **Q.** Do you consider this monitoring a waste of money?
- **A.** No, not a waste of money, but I do think there are ways to save money. One way we save money is no hard copies of yearly report mailed out any more.
- **A.** Is there an opportunity for public participation concerning this site and yearly reports?
- **Q.** The EPA holds an annual public meeting and a fact sheet goes out once a year.
- **A.** Isn't it a conflict of interest for state to monitor this site? Since the state is a responsible party and must pay for monitoring and cleanup--could they justify a cut back in monitoring just to save money?
- **Q.** That is why it is important for Cabinet level personnel to understand what Maxey Flats is and why it needs to be monitored.
- **A.** What about seismic activities?
- **Q.** No one here is qualified to answer that question. You would really need to talk to someone from the National Geologic Survey.
- **Q.** After 9/11 is there extra protection at Maxey Flats?
- **A.** There are other higher risk areas. There is not much we can do.
- **Q.** As a reporter, when the public doesn't get information, one might automatically assume someone is trying to hide or covered up something. How can the public get more information about Maxey Flats?
- **Q.** I would suggest that once the annual report is made to EPA that a summary be done in laymen's terms.
- **Q.** What would keep government officials from discontinuing funding for Maxey Flats?
- **A.** Monitoring and maintenance of the site is required in the 100-year agreement.
- **Q.** Why isn't this site going to be capped sooner—seems like 100 years is a long time?
- **A.** The cap is to be put on after a time to wait for subsidence.
- **Q.** Where did all the radioactive waste come from?
- **A.** EPA has list of sources of wastes in Maxey Flats.
- Q. Why then aren't some of these businesses being responsible and pay for the costs?
- **A.** They do help pay for cap and containment of the site, but the Commonwealth's tax dollars will pay for montoring and after 20 years it will pay for all costs.

After the presentation and question and answer session, a recommendation was made by Chair, Aloma Dew. Athe recommendation included the need for fish tissue tesing, seismic studies and analysis and vigilant monitoring of the site. After discussion, a motion was made by Betsy Bennett and seconded by Jean Dorton to approve a letter to be sent to Governor Paul E. Patton stating the concerns of EQC regarding Maxey Flats. The motion passed unanimously. The Chair thanked everyone for coming.

## • Maxey Flats Tour

Afterwards the meeting EQC commissioners and staff took a tour of Maxey Flats. Due to construction at the site, the public and press were not allowed to attend the tour. During the tour, commissioners and staff observed:

**The east pond** – designed to hold water from a 100 year storm. Construction activities have led to 2 feet of silt in the pond.

**Plastic cap** – synthetic black plastic being constructed over a 60 acre area to prevent water infiltration into site. It should last 20 years, but hope it will last longer.

**Articulate block drainage channels** – designed to slow water coming off plastic. Commissioners noted problem with vandalism, burning of buildings. Discussed the need to protect the forest buffer around the site and expressed concern about fire and emergency response at site.

# • EQC Recommendations

The commission amended its <u>Maxey Flats recommendations</u> based on findings from its tour. Additions included the need for fire protection and emergency response plans, silt removal from a holding pond and protection of the site from vandalism. A motion to approve the amended recommendations was made by Betsy Bennett and seconded by Robert Riddle. The motion passed unanimously and is attached and made a part of these minutes.

signed	 	

With no further business the meeting adjourned at 11:00 a.m.